## What is claimed is:

1. A germicidal lamp for use in a purification system comprising:

an ultraviolet lamp having an exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

- 2. A germicidal lamp as in claim 1 wherein: the exterior non-uniform surface comprises grooves.
- 3. A germicidal lamp as in claim 1 wherein: the exterior non-uniform surface comprises a helix.
- 4. A germicidal lamp as in claim 1 wherein:
  the exterior non-uniform surface comprises a double
  helix
  - 5. A germicidal lamp as in claim 1 wherein: said ultraviolet lamp comprises a fluorescent lamp.

6. A germicidal lamp for use in a purification system comprising:

a cylindrical ultraviolet lamp; and
an envelope having an exterior non-uniform surface
contour enclosing said cylindrical ultraviolet lamp,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

- 7. A germicidal lamp as in claim 6 wherein: the exterior non-uniform surface comprises grooves.
- 8. A germicidal lamp as in claim 6 wherein: the exterior non-uniform surface comprises a helix.
- 9. A germicidal lamp as in claim 6 wherein:
  the exterior non-uniform surface comprises a double
  helix.
  - 10. A germicidal lamp as in claim 6 wherein: said ultraviolet lamp comprises a fluorescent lamp.
  - 11. A water purification system comprising: a chamber for containing a fluid to be purified; and

an ultraviolet lamp comprising an exterior non-uniform surface contour placed within said chamber,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.

12. A water purification system as in claim 11 wherein said ultraviolet lamp comprises:

a cylindrical lamp; and

an envelope placed over said cylindrical lamp, said envelope having the exterior non-uniform surface contour.

13. A water purification system as in claim 11 wherein:

the non-uniform surface contour comprises grooves.

14. A water purification system as in claim 11 wherein:

the non-uniform surface contour comprises a helix.

15. A water purification system as in claim 11 wherein:

said ultraviolet lamp comprises a fluorescent lamp.

- 16. An air purification system comprising:
- a room having air therein; and
- a ultraviolet lamp having an exterior non-uniform surface contour placed within said room,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow in the air.

17. An air purification system as in claim 16 wherein said ultraviolet lamp comprises:

a cylindrical lamp; and

an envelope placed over said cylindrical lamp, said envelope having the exterior non-uniform surface contour.

- 18. An air purification system as in claim 16 wherein: the non-uniform surface contour comprises grooves.
- 19. An air purification system as in claim 16 wherein: the non-uniform surface contour comprises a helix.
- 20. An air purification system as in claim 16 wherein: said ultraviolet lamp comprises a fluorescent lamp.

21. An air purification system as in claim 16 further comprising:

blower, said blower moving air over said ultraviolet lamp.

22. A method of purifying a fluid comprising the steps of:

providing fluid having a flow; and

placing within the fluid flow an ultraviolet lamp

comprising an exterior non-uniform surface contour,

whereby the exterior non-uniform surface contour is capable of creating turbulent flow.